Data

Center of conrod bearing bore to center of conrod bushing bore	131.950 / 130.050
Width of conrod at conrod bearing bore and conrod bushing bore	27.890 / 27.857
Basic bore for conrod bearing shells	51.619 / 51.600
Basic bore for conrod bushing	26.021 / 26.000
Conrod bushing inside dia.	23.013 / 23.007
Peak to valley height on inside of conrod bushing	0.004
Permissible stagger of conrod bore to conrod bushing bore in reference to a length of 100 mm	0.1
Permissible difference in parallel between axes: conrod bearing bore to conrod bushing bore in reference to a length of 100 mm	dia. 0.015
Permissible deviation of conrod bearing bore from true	0.020
Permissible difference in weight of all connecting rods of one engine	5 gr.

Tightening torque

Conrod nuts	Initial torque	40–50 Nm
	Torque angle	90–100°

Conventional tool

Connecting rod checking and straightening tool	Made by Krupp GmbH, 5309 Meckenheim e.g. Model CL 6

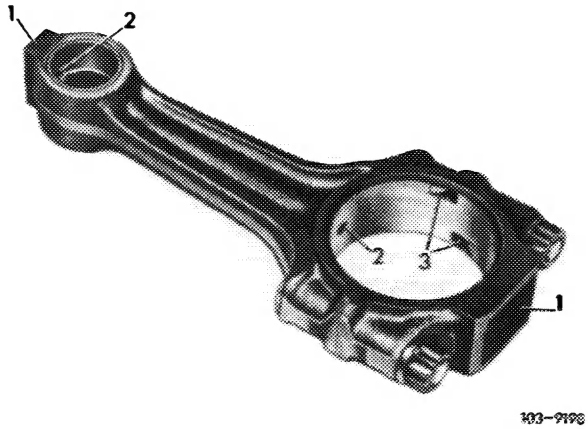
Note

Connecting rods, which are overheated (blue discoloration) due to bearing damage, may not be re-used.

The connecting rod and its cap are marked to fit together. The connecting rod stem must not show cross scoring and notches.

Connecting rods with a machined conrod bushing are delivered as replacement parts.

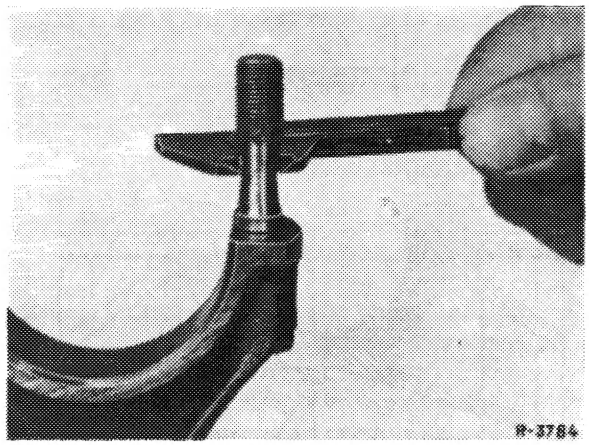
When renewing conrods pay attention to different weights of rods.



103–9198

Repairing

1 Check conrod bolts and replace if necessary (03–310).



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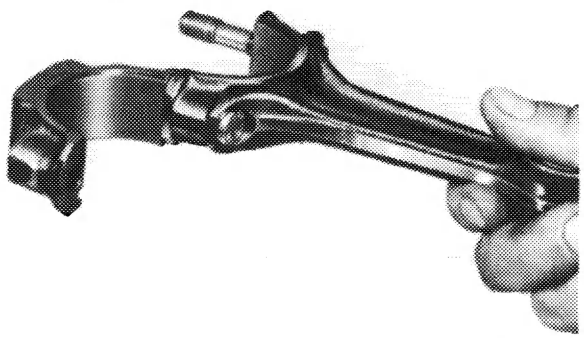
2 Check conrod bolt bores.

Place conrod cap on a conrod bolt. If the conrod cap moves down by its own weight, the connecting rod must be replaced.



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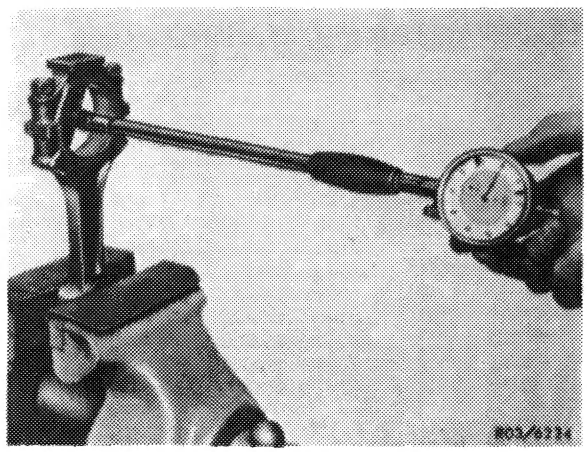
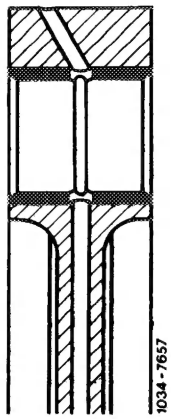
3 Mount connecting rod bearing cap and tighten to 40–50 Nm and 90–100° angle of rotation torque.

4 Measure conrod bearing basic bore. If a basic bore exceeds the value of 51.62 mm or shows conicity, hone bearing surface of bearing cap on a surface plate up to max. 0.02 mm.



5 Press in new conrod bushing that oil bores match.

Installation pressure 2500 Nm.



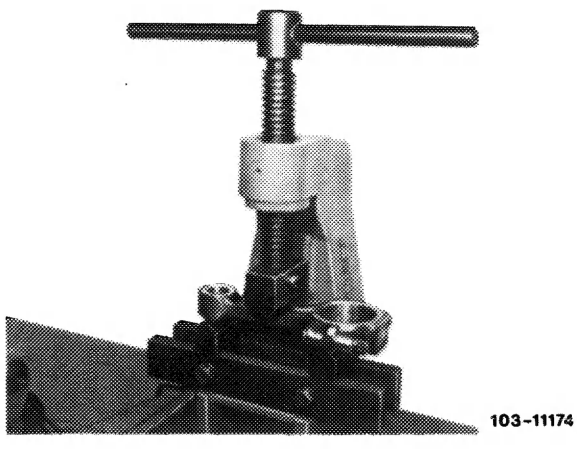
6 Mill or ream out conrod bushing.

7 Hone side bearing surfaces of connecting rod on a surface plate.

Squaring

8 Square connecting rod with a conrod tester.

9 Align parallel of conrod bore to conrod bushing bore.



10 Correct stagger of conrod bore to conrod bushing bore.